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(54) **Pharmaceutical carton with additional panels providing information**

Karton für Arzneimittel mit zusätzlichen informationstragenden Verschlusskappen

Carton pour médicaments avec rabats supplémentaires portant des informations

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**EP 0 818 393 B1**

## Description

**[0001]** The present invention relates to cartons, particularly but not exclusively cardboard pharmaceutical cartons.

**[0002]** Many pharmaceutical pills, tablets, etc. are packaged in cardboard cartons. The cartons also contain separate leaflets providing information on the use and dosage of the pharmaceutical, along with safety advice. However, the leaflets are commonly ignored by users, and/or discarded or lost. The elderly also find separate leaflets hard to handle and read. This could lead to accidental misuse of the pharmaceutical. Naturally, it is desired that the information with the pharmaceutical is read by the user, or at least so clearly available to read that the user is more likely to read it, reducing the chance of misuse. The information should also be continually available for all dosages of the pharmaceutical, and not readily or accidentally discardable.

**[0003]** FR-A-1.501.985 discloses a packaging cuboid carton having five lateral panels in which two of the panels (1) and (5) are superposed and glued along longitudinal edge zones (12), (15) of panel (1). The outer panel (1) has a tear line which, when torn, forms the outer panel (1) into a lid hinged along line 17. The inner panel (5) has a rectangular wing (10) cutout on three sides and hinged along line (16). The wing (10) can be torn off along line (16). The lid can be secured by the use of tab (11).

**[0004]** According to one aspect of the present invention, there is provided a pharmaceutical carton having a plurality of panels with an opening portion for access to the inside of the carton being provided in a first panel, the opening portion being bounded by irreparable or non-resealable weakenings provided between said opening portion and the rest of the first panel, a second panel being for provision of information and being locatable to wholly or substantially close off an aperture formed by removal of the opening portion so requiring movements by a user to obtain access to the inside of the carton characterised in that the first panel overlies the second panel, the second panel is substantially the same areal dimensions as the opening portion and has oppositely extending lugs and serves when the opening portion is removed as a securably recloseable lid across the aperture with the lugs engaging under corresponding sides of the rest of the first panel.

**[0005]** Preferably, the second panel is provided with one or more connected extension parts, the parts being folded inward under the second panel when the second panel is engaged in the rest of the first panel

**[0006]** Preferably also, the plurality of panels includes three major panels and three minor panels with the carton being formed into a sleeve by two minor panels being secured together.

**[0007]** By requiring movement by the user of the second panel before access, even partial access, to the contents of the carton, this ensures as far as possible

that the information on that panel has at least been seen, if not read by the user, prior to the first and/or every dose.

Also, by having the second panel being integral with the carton, the information thereon cannot be discarded (compared with separate leaflets which are often discarded, most usually after the first dose has been taken or the information being provided on a tear-off panel to obtain access to the contents).

**[0008]** The carton, like pharmaceutical cartons in general, may be of a rectangular cuboid nature. The size and shape of the opening portion is dependent upon the shape of the carton. Two of the major panels and two of the minor panels of the carton have end flaps which are closed over and secured together after the contents are inserted

**[0009]** The opening portion also preferably includes an opening means to assist opening of the opening portion by the user. The opening means may be a tab or a flap etc., which can be extended, e.g. folded, outwardly from the opening portion or the main body of the carton for manual grip. The opening portion could also be discardable after opening.

**[0010]** Where one or more parts are provided connected to the second panel, all or some of them may be initially lightly bonded together and/or bonded to the opening portion with an adhesive to ensure that the panels do not unfold or otherwise interfere during the insertion of the contents into the carton.

**[0011]** The second panel and parts can accommodate all the information required to be associated with the relevant pharmaceutical such that separate leaflets are not needed. The time, effort and additional machinery needed to print, fold and insert separate leaflets can thus be avoided. The problems caused by the packaging of leaflets in cartons are considerable, and they are one of the commonest sources of production stoppage or wastage (of a pharmaceutical "packed" product, any slight defect in which leads to complete destruction of the product). The information on the second panel and parts may be of large print for the elderly, or in Braille for the blind, etc.

**[0012]** The provision of irreparable or non-resealable weakenings between the rest of the first panel and the opening portion makes the carton 'tamper-evident'. That is, it is possible to determine whether the carton has been opened (and thus possibly tampered with) prior to proper use. This is especially important for pharmaceuticals. The weakenings assist ease of separation of the opening portion from the main body of the carton to open the carton, whilst still providing an initial seal. Such weakenings include perforations, tear perforations, cut creases, scoring, reverse scoring, etc. The other parts of the carton can be sealed by glue.

**[0013]** The carton of the present invention may be used for any pharmaceuticals, and veterinary substances and medicines, and also non-medical health care products which have detailed instructions therewith. The term "pharmaceutical" as used herein includes

these other types of products.

**[0014]** According to a second aspect of the present invention, there is provided a flat blank for forming a pharmaceutical carton, the blank having a plurality of transverse panels foldable together to form a sleeve to receive pharmaceutical contents, the ends of the panels forming the sleeve having flaps to be closed over and adhere together at each end of the sleeve to secure the contents and form the carton as hereinbefore described.

**[0015]** Preferably, with the extension parts of the second panel being integral with the carton blank, only one blank need be formed, and that blank can be directly assembled or part assembled into the desired carton (for subsequent packing). More preferably, the blank can be assembled using apparatus currently assembling blanks without information panels.

**[0016]** The blank and/or carton of the present invention may be made from any suitable material or combination of materials. Usually the material is (card)board, which is easily workable, foldable, and acceptable of printed matter. Preferably, the part assembled carton is collapsible to reduce its size and so assist transportation to the packer.

**[0017]** Embodiments of the present invention shall now be described by way of example only and with reference to the accompanying drawings in which:-

Fig. 1 is a plan view of a blank according to one embodiment of the present invention;

Fig. 2 is a perspective view of a carton formed from the blank of Fig. 1; and

Fig. 3 is a cross sectional view of the carton in Fig. 2 prior to opening.

**[0018]** Referring to the drawings, Fig. 1 shows an integral blank of cardboard having three major panels 6, 8, 10 and three minor panels 4, 4a and 4c. All internal crease lines are for folds apart from lines A of an opening portion 2. Lines A are two lines of reverse scoring. Perforations could also be added if desired. These weakenings form an initially sealed barrier, but also assist the initial opening of the opening portion 2.

**[0019]** The two minor panels 4a and 4c overlap and are glued together to create a sleeve of a cuboid carton having a top first panel 6 and bottom third panel 8. The blank has a second panel 10 with two extension parts 10A and 10B which will be folded underneath the first panel 6. The lowermost part 10A includes an adhesive area 12 to lightly bond it to the undersurface of panel 10 upon assembly to ensure that the second panel 10 and extension parts 10A do not unfold or otherwise interfere during the insertion of the contents into the carton.

**[0020]** The blank may be folded and assembled using existing machinery, avoiding new tooling costs. The assembled, (that is part-assembled ready for contents insertion) carton made from this blank is collapsible, i.e. can be flattened, for transportation.

**[0021]** Fig. 2 shows a fully assembled carton with the

opening portion 2 and the second panel 10 with one extension part 10A thereunder, both components partly opened for clarity. In Figs 2 and 3, only the second panel 10 and one extension part 10A of the blank in Fig. 1 are shown for clarity. On the second panel 10 and extension parts 10A, 10B is written all the user information required. As the second panel 10 and extension parts 10A, 10B are integral with the carton, this information is always available to the user. As also shown in Fig. 3, the second panel 10 and extension part 10A are located wholly between the opening portion 2 and the inside 15 of the carton and require moving before access into the carton is possible. Thus, at least the top face of the second panel 10 will be visible to the user when the opening portion 2 is opened. The extension parts 10A, 10B of the second panel 10 may then be unfolded to access any information on the other faces.

**[0022]** The second panel 10 includes two lugs 11 extending therefrom to hold the second panel 10 in place whilst the opening portion 2 is opened. The lugs 11 also allow the second panel 10 to be securely recloseable, thus requiring movement (and thus being visible) every time the carton is opened by the user. The opening portion 2 could be discardable after opening by weakening its attachment along line B in Fig. 1, e.g. using perforations. The lugs 11 would ensure that the contents of the carton are still held therewithin.

**[0023]** Once the contents have been inserted into the sleeve of the carton, end flaps 4b of major panels 6 and 8 and of minor panels 4 and 4c are glued together. The primary access to the contents of the carton is therefore through the opening portion 2. As the opening portion 2 is attached to the rest of the first panel 6 using the irreparable weakenings of line A, the carton is tamper evident.

**[0024]** The opening portion 2 includes a flap 16 and associated aperture 18. The flap 16 can be folded outwardly of the plane of the opening portion 2 as shown in Fig. 2 by pulling thereunder through the aperture 18. The flap 16 assists opening of the opening portion 2.

**[0025]** The present invention thus provides a tamper evident carton which can have all user information integral therewith. The user has assurance of an untampered product with the necessary information always available. At least some of the information must be seen by the user upon opening of the carton in removing the opening portion and subsequently in opening the second panel 10. This will ensure as far as possible that the necessary instructions and information are read by the user prior to each usage.

**[0026]** Variations and modifications may be made within the scope of the present invention as claimed hereinafter.

## Claims

1. A pharmaceutical carton having a plurality of panels

with an opening portion for access to the inside of the carton being provided in a first panel, the opening portion being bounded by irreparable or non-resealable weakenings provided between said opening portion and the rest of the first panel, a second panel being for provision of information and being locatable to wholly or substantially close off an aperture formed by removal of the opening portion so requiring movement by a user to obtain access to the inside of the carton **characterised in that** the first panel (6) overlies the second panel (10), the second panel (10) is substantially the same areal dimensions as the opening portion (2) and has oppositely extending lugs (11) and serves, when the opening portion (2) is removed, as a securably re-closeable lid across the aperture with the lugs (11) engaging under corresponding sides of the rest of the first panel (6).

2. A pharmaceutical carton as claimed in Claim 1, **characterised in that** the second panel (10) is provided with one or more connected extension parts (10A), (10B) the parts (10A), (10B) being folded inward under the second panel (10) when the second panel (10) is engaged in the rest of the first panel (6).
3. A pharmaceutical carton as claimed in Claims 1 or 2, **characterised in that** the plurality of panels includes three major panels (6), (8), (10) and three minor panels (4), (4a), (4c) with the carton being formed into a sleeve by two minor panels (4a), (4c) being secured together.
4. A pharmaceutical carton as claimed in Claims 2 or 3, **characterised in that** the second panel (10) and any extension parts (10A), (10B) accommodate all, the information required to be associated with the relevant pharmaceutical to be packaged within the carton.
5. A pharmaceutical carton as claimed in Claims 1 or 3, **characterised in that** one side of the weakenings of the opening portion (2) is along a fold line between the first panel (6) and an adjacent minor panel (4a) being one of the two minor panels (4a), (4c) secured together.
6. A pharmaceutical carton as claimed in Claim 5, **characterised in that** an aperture (18) is provided to assist in removing the opening portion (2) from the rest of the first panel (6).
7. An elongate carton blank for forming a pharmaceutical carton, the blank having a plurality of transverse panels (6, 8, 10) foldable together to form a sleeve to receive pharmaceutical contents, the ends of the panels forming the sleeve having flaps

(4b) to be closed over and adhere together at each end of the sleeve to secure the contents and form the carton as defined in any one of Claims 1 to 6.

## Patentansprüche

1. Pharmazeutikumkarton mit mehreren Tafeln, die einen in einer ersten Tafel ausgebildeten Öffnungsteil für den Zugang zum Innenraum des Kartons enthalten, wobei der Öffnungsteil durch irreparable oder nichtwiederverschließbare Schwächungen, die zwischen dem Öffnungsteil und dem Rest der ersten Tafel vorgesehen sind, begrenzt wird, und wobei eine zweite Tafel zur Bereitstellung von Informationen vorgesehen ist und zum vollständigen oder weitgehenden Schließen einer durch Entfernen des Öffnungsteils gebildeten Öffnung angeordnet werden kann und somit Bewegung durch einen Benutzer erfordert, damit Zugang zum Innenraum des Kartons geschaffen wird, **dadurch gekennzeichnet, daß** die erste Tafel (6) über der zweiten Tafel (10) liegt, die zweite Tafel (10) im wesentlichen die gleichen Flächenabmessungen aufweist wie der Öffnungsteil (2) und sich einander gegenüberliegend erstreckende Laschen (11) aufweist und nach Entfernung des Öffnungsteils (2) als befestigbarer, wiederverschließbarer Deckel über der Öffnung dient, wobei die Laschen (11) unter entsprechenden Seiten des Rests der ersten Tafel (6) eingreifen.
2. Pharmazeutikumkarton nach Anspruch 1, **dadurch gekennzeichnet, daß** die zweite Tafel (10) mit einem oder mehreren miteinander verbundenen Verlängerungsteilen (10A), (10B) versehen ist, wobei die Teile (10A), (10B) unter der zweiten Tafel (10) nach innen gefaltet sind, wenn die zweite Tafel (10) mit dem Rest der ersten Tafel (6) in Eingriff steht.
3. Pharmazeutikumkarton nach Anspruch 1 oder 2, **dadurch gekennzeichnet, daß** die mehreren Tafeln drei Haupttafeln (6), (8), (10) und drei Nebentafeln (4), (4a), (4c) umfassen, wobei der Karton durch zwei Nebentafeln (4a), (4c), die aneinander befestigt werden, zu einer Hülle geformt wird.
4. Pharmazeutikumkarton nach Anspruch 2 oder 3, **dadurch gekennzeichnet, daß** die zweite Tafel (10) und ein beliebiger Verlängerungsteil (10A), (10B) alle Informationen aufnehmen, die dem entsprechenden, in dem Karton zu verpackenden Pharmazeutikum zugeordnet werden sollen.
5. Pharmazeutikumkarton nach Anspruch 1 oder 3, **dadurch gekennzeichnet, daß** sich eine Seite der Schwächungen des Öffnungsteils (2) entlang einer Falzlinie zwischen der ersten Tafel (6) und einer be-

nachbarten Nebentafel (4a), die eine der beiden aneinander befestigten Nebentafeln (4a), (4c) ist, befindet.

6. Pharmazeutikumkarton nach Anspruch 5, **dadurch gekennzeichnet, daß** zur Unterstützung des Entfernens des Öffnungsteils (2) vom Rest der ersten Tafel (6) eine Öffnung (18) vorgesehen ist.
7. Länglicher Kartonzuschnitt zur Bildung eines Pharmazeutikumkartons, wobei der Zuschnitt mehrere Quertafeln (6, 8, 10) aufweist, die zur Bildung einer Hülle zur Aufnahme eines Pharmazeutikuminhalts zusammengefaltet werden können, wobei die Enden der die Hülle bildenden Tafeln Klappen (4b) aufweisen, die an jedem Ende der Hülle zugeklappt und zusammengeklebt werden sollen, um den Inhalt zu sichern und den Karton nach einem der Ansprüche 1 bis 6 zu bilden.

#### Revendications

1. Carton d'emballage pharmaceutique ayant une pluralité de panneaux avec une portion d'ouverture permettant l'accès à l'intérieur du carton prévue dans un premier panneau, la portion d'ouverture étant bordée par des affaiblissements non réparables ou non refermables prévus entre ladite portion d'ouverture et le reste du premier panneau, un deuxième panneau étant prévu pour fournir des informations et pouvant être placé de manière à fermer entièrement ou substantiellement une ouverture formée par le retrait de la portion d'ouverture, en nécessitant ainsi un déplacement par un utilisateur pour avoir accès à l'intérieur du carton, **caractérisé en ce que** le premier panneau (6) recouvre le deuxième panneau (10), le deuxième panneau (10) a substantiellement les mêmes dimensions surfaciques que la portion d'ouverture (2) et a des pattes (11) s'étendant dans des directions opposées et sert, lorsque la portion d'ouverture (2) est enlevée, de couvercle refermable de manière sûre en travers de l'ouverture, les pattes (11) s'engageant sous des côtés correspondants du reste du premier panneau (6).
2. Carton d'emballage pharmaceutique selon la revendication 1, **caractérisé en ce que** le deuxième panneau (10) est pourvu d'une ou de plusieurs parties d'extension connectées (10A), (10B), les parties (10A), (10B) étant pliées vers l'intérieur sous le deuxième panneau (10) lorsque le deuxième panneau (10) est engagé dans le reste du premier panneau (6).
3. Carton d'emballage pharmaceutique selon les revendications 1 ou 2, **caractérisé en ce que** la plu-

ralité de panneaux comporte trois panneaux majeurs (6), (8), (10), et trois panneaux mineurs (4), (4a), (4c), le carton étant formé en forme de manchon par deux panneaux mineurs (4a), (4c) fixés l'un à l'autre.

4. Carton d'emballage pharmaceutique selon les revendications 2 ou 3, **caractérisé en ce que** le deuxième panneau (10) et toutes parties d'extension (10A), (10B), reçoivent toutes les informations nécessaires associées au produit pharmaceutique correspondant devant être emballé dans le carton.
5. Carton d'emballage pharmaceutique selon les revendications 1 ou 3, **caractérisé en ce qu'un** côté des affaiblissements de la portion d'ouverture (2) est le long d'une ligne de pliure entre le premier panneau (6) et un panneau mineur adjacent (4a), étant l'un des deux panneaux mineurs (4a), (4c) fixés l'un à l'autre.
6. Carton d'emballage pharmaceutique selon la revendication 5, **caractérisé en ce qu'une** ouverture (18) est prévue pour faciliter le retrait de la portion d'ouverture (2) du reste du premier panneau (6).
7. Ebauche de carton d'emballage allongée pour former un carton d'emballage pharmaceutique, l'ébauche ayant une pluralité de panneaux transversaux (6, 8, 10) pouvant être pliés ensemble pour former un manchon destiné à recevoir les produits pharmaceutiques, les extrémités des panneaux formant le manchon ayant des volets (4b) pour réaliser la fermeture et devant être collés ensemble à chaque extrémité du manchon pour contenir le contenu et former le carton tel que défini dans l'une quelconque des revendications 1 à 6.

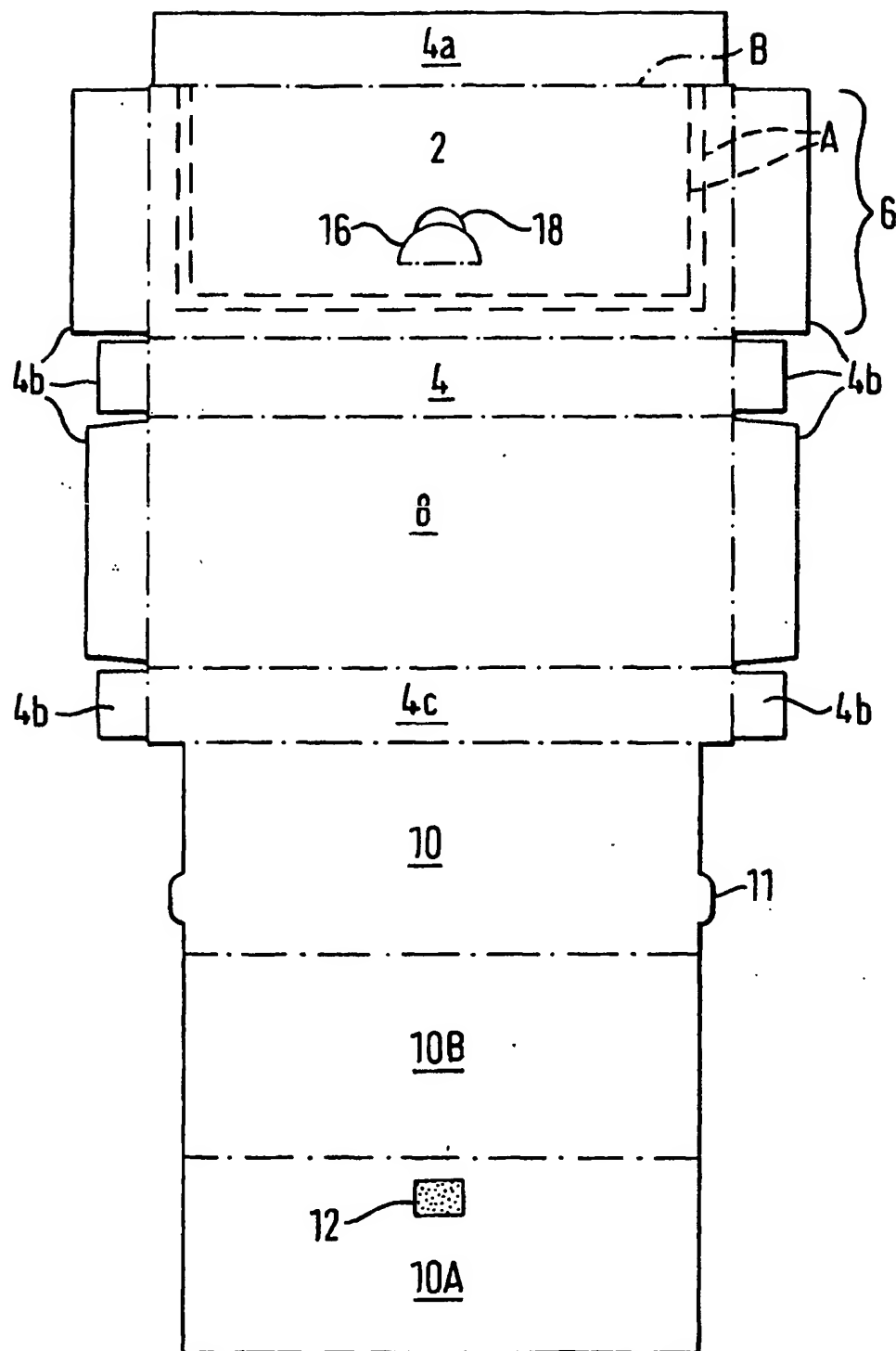


FIG. 1

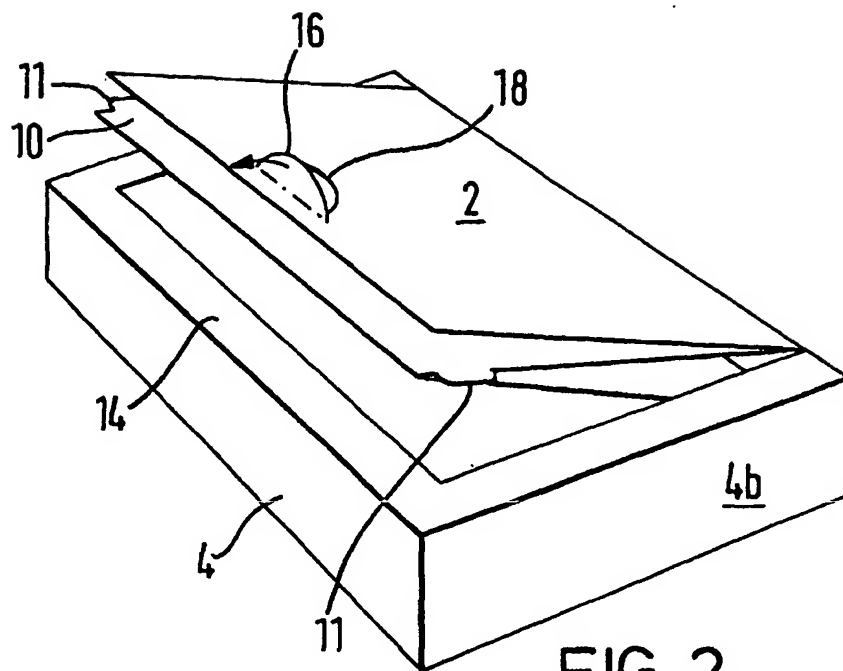


FIG. 2

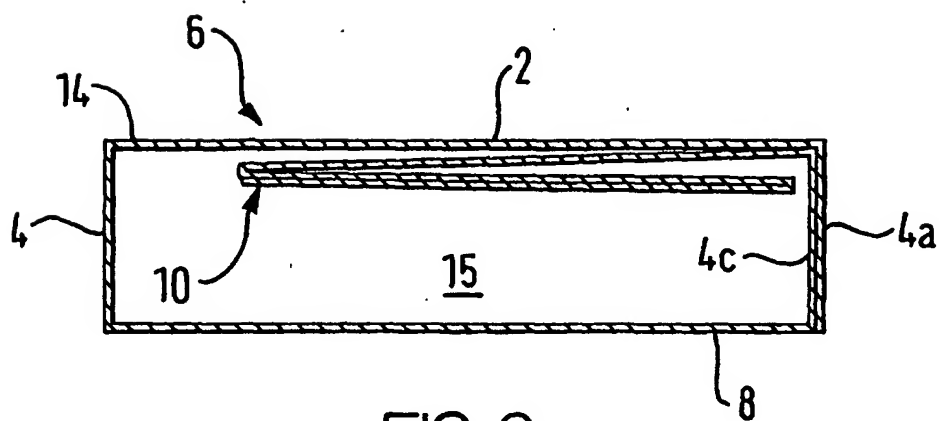


FIG. 3